

(FILE 'HOME' ENTERED AT 14:49:09 ON 30 JUN 2006)

FILE 'REGISTRY' ENTERED AT 14:49:22 ON 30 JUN 2006

L1 2 S ANISIC ACID/CN
L2 1 S TOLUIC ACID/CN

FILE 'CAPLUS' ENTERED AT 14:50:46 ON 30 JUN 2006

FILE 'CAPLUS' ENTERED AT 14:51:09 ON 30 JUN 2006

L3 16 S 1335-08-6/PREP
L4 15 S 1335-08-6/PROC
L5 199 S 100-09-4/PROC
L6 514 S 100-09-4/PREP
L7 0 S 25567-10-6100-09-4/PREP
L8 46 S 25567-10-6/PREP
L9 36 S 25567-10-6/PROC
L10 797 S L3 OR L4 OR L5 OR L6 OR L7 OR L8 OR L9
L11 0 S L10 AND PALLADIUM AND (HETEROPOLYACID OR OXO ACID)
L12 48 S L10 AND PALLADIUM
L13 1 S L12 AND (HETEROPOLY?)
L14 5 S L12 AND OXYGEN AND CO
L15 4 S L14 AND PY<2003

=>

=> s anisic acid/cn
L1 2 ANISIC ACID/CN

=> d

L1 ANSWER 1 OF 2 REGISTRY COPYRIGHT 2006 ACS on STN
RN 1335-08-6 REGISTRY
ED Entered STN: 16 Nov 1984
CN Benzoic acid, methoxy- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Anisic acid (8CI)
OTHER NAMES:
CN Methoxybenzoic acid
MF C8 H8 O3
CI IDS, COM
LC STN Files: AGRICOLA, ANABSTR, BIOSIS, BIOTECHNO, CA, CAPLUS, CASREACT,
CBNB, CHEMCATS, CHEMLIST, CIN, CSCHM, EMBASE, IFICDB, IFIPAT, IFIUDB,
NAPRALERT, PROMT, TOXCENTER, USPATFULL
Other Sources: EINECS**
(**Enter CHEMLIST File for up-to-date regulatory information)



D1-O-Me

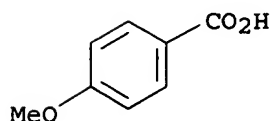
D1-CO₂H

153 REFERENCES IN FILE CA (1907 TO DATE)
8 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
153 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> d 2

L1 ANSWER 2 OF 2 REGISTRY COPYRIGHT 2006 ACS on STN
RN 100-09-4 REGISTRY
ED Entered STN: 16 Nov 1984
CN Benzoic acid, 4-methoxy- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN p-Anisic acid (6CI, 7CI, 8CI)
OTHER NAMES:
CN 4-Anisic acid
CN 4-Methoxybenzoic acid
CN Anisic acid
CN Draconic acid
CN NSC 32742
CN NSC 7926
CN p-Methoxybenzoic acid
FS 3D CONCORD
MF C8 H8 O3
CI COM
LC STN Files: AGRICOLA, ANABSTR, BEILSTEIN*, BIOSIS, BIOTECHNO, CA, CAOLD,
CAPLUS, CASREACT, CHEMCATS, CHEMINFORMRX, CHEMLIST, CSCHM, DDFU,
DETERM*, DRUGU, EMBASE, GMELIN*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE,
MRCK*, MSDS-OHS, NAPRALERT, PIRA, RTECS*, SPECINFO, TOXCENTER, ULIDAT,

USPAT2, USPATFULL
(*File contains numerically searchable property data)
Other Sources: DSL**, EINECS**, TSCA**
(**Enter CHEMLIST File for up-to-date regulatory information)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

3264 REFERENCES IN FILE CA (1907 TO DATE)
83 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
3269 REFERENCES IN FILE CAPLUS (1907 TO DATE)
3 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

=> s toluic acid/cn
L2 1 TOLUIC ACID/CN

=> d

L2 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2006 ACS on STN
RN 25567-10-6 REGISTRY
ED Entered STN: 16 Nov 1984
CN Benzoic acid, methyl- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Toluic acid (8CI)
OTHER NAMES:
CN ar-Toluic acid
CN Methylbenzoic acid
MF C8 H8 O2
CI IDS, COM
LC STN Files: AGRICOLA, ANABSTR, BIOSIS, BIOTECHNO, CA, CAPLUS, CASREACT,
CHEMLIST, CIN, CSNB, DETHERM*, EMBASE, ENCOMPLIT, ENCOMPLIT2, ENCOMPPAT,
ENCOMPPAT2, IFICDB, IFIPAT, IFIUDB, PROMT, TOXCENTER, USPAT2, USPATFULL
(*File contains numerically searchable property data)
Other Sources: EINECS**, NDSL**, TSCA**
(**Enter CHEMLIST File for up-to-date regulatory information)



D1-Me

D1-CO2H

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

336 REFERENCES IN FILE CA (1907 TO DATE)
35 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
336 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> d 1-4 ibib abs hitstr

L15 ANSWER 1 OF 4 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1996:737885 CAPLUS
DOCUMENT NUMBER: 126:7825
TITLE: Preparation of aromatic carboxylic acids
INVENTOR(S): Fujiwara, Juzo; Takagi, Ken; Taniguchi, Hiroki
PATENT ASSIGNEE(S): Sumitomo Chemical Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 3 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|----------|-----------------|--------------|
| JP 08245501 | A2 | 19960924 | JP 1995-51485 | 19950310 <-- |
| PRIORITY APPLN. INFO.: | | | JP 1995-51485 | 19950310 |

OTHER SOURCE(S): CASREACT 126:7825

AB The title compds. are prepared by reaction of aromatic compds. with CO in the presence of Pd (in)organic salts, peroxy acid salts and/or O, and haloalkyl carboxylic acids. PhH was treated with CO in the presence of Pd(OAc)₂, K peroxodisulfate, and CF₃CO₂H at 25° for 20 h to give 1400 mol.% (based on Pd) benzoic acid.

IT 100-09-4P, p-Methoxybenzoic acid

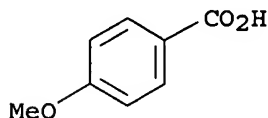
RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)

(preparation of aromatic carboxylic acids by oxidative carbonylation of arenes

with Pd compds. and haloalkaonic acids)

RN 100-09-4 CAPLUS

CN Benzoic acid, 4-methoxy- (9CI) (CA INDEX NAME)



L15 ANSWER 2 OF 4 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1991:680252 CAPLUS
DOCUMENT NUMBER: 115:280252
TITLE: Palladium carbene cluster: synthesis, structure and reactivity
AUTHOR(S): Stromnova, T. A.; Busygina, I. N.; Kochubei, D. I.; Moiseev, I. I.
CORPORATE SOURCE: N. S. Kurnakov Inst. Gen. Inorg. Chem., Moscow, 117907, USSR
SOURCE: Journal of Organometallic Chemistry (1991), 417(1-2), 193-204
CODEN: JORCAI; ISSN: 0022-328X
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 115:280252

AB The first palladium carbene cluster, μ -tetrakis(diphenylmethylidene)- μ -tetraacetato-quadro-tetrapalladium(4Pd-Pd), Pd₄(μ -CPh₂)₄(μ -OAc)₄ (I), was prepared by substitution of diphenylcarbene ligands for CO-groups in μ -tetrakis(carbonyl)- μ -tetraacetato-quadro-tetrapalladium(4Pd-Pd), Pd₄(μ -CO)₄(μ -OAc)₄ (II) and characterized with EXAFS data. Reactivity of I, II

and related clusters is discussed. Thermolysis of the clusters involves inner-sphere oxidation of carbene or carbonyl ligands during which an oxygen atom is transferred from the carboxylate group to the carbene or carbonyl ligand. Thermolysis of carbonyl clusters in benzene or toluene solns. gives the products of CO₂ insertion into the C-H bond of the solvent forming benzoic acid from benzene and a mixture of phenylacetic and tolyl acids from toluene.

IT 25567-10-6P
RL: FORM (Formation, nonpreparative); PREP (Preparation)
(formation of, by thermolysis of palladium carbonyl
carboxylate cluster in presence of toluene)
RN 25567-10-6 CAPLUS
CN Benzoic acid, methyl- (9CI) (CA INDEX NAME)



D1-Me

D1-CO₂H

L15 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1991:608194 CAPLUS

DOCUMENT NUMBER: 115:208194

TITLE: Thermolysis of tetranuclear palladium
clusters: unexpected transfer of oxygen
from a carboxylate group to carbene and carbonyl
bridging ligands; carbon dioxide insertion into
carbon-hydrogen bonds

AUTHOR(S): Stromnova, T. A.; Busygina, I. N.; Tikhonova, N. Yu.;
Moiseev, I. I.

CORPORATE SOURCE: N. S. Kurnakov Inst. Gen. Inorg. Chem., Moscow,
117907, USSR

SOURCE: Mendeleev Communications (1991), (2), 58-9
CODEN: MENCEX; ISSN: 0959-9436

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Thermolysis of the tetranuclear palladium clusters
[Pd₄(μ-Q)₄(μ-O₂CR)₄] (Q = CPh₂, CO; R = Me, CMe₃, Ph,
CH₂Cl, CF₃) involve inner-sphere oxidation of carbene or carbonyl ligands
during which an oxygen atom transfer occurs from the carboxylate
group to the carbene or carbonyl ligand; the thermolysis of the carbonyl
clusters gives the products of CO₂ insertion into the C-H bond of benzene
or toluene used as solvents forming benzoic acid from benzene and a mixture
of phenylacetic and toluic acids from toluene.

IT 25567-10-6P, Toluic acid
RL: FORM (Formation, nonpreparative); PREP (Preparation)
(formation of, by thermolysis of tetranuclear palladium
carboxylate cluster in toluene)

RN 25567-10-6 CAPLUS

CN Benzoic acid, methyl- (9CI) (CA INDEX NAME)



D1-Me

D1-CO₂H

L15 ANSWER 4 OF 4 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1980:514092 CAPLUS

DOCUMENT NUMBER: 93:114092

TITLE: Palladium-promoted one-step carboxylation of aromatic compounds with carbon monoxide

AUTHOR(S): Fujiwara, Yuzo; Kawauchi, Tomio; Taniguchi, Hiroshi

CORPORATE SOURCE: Dep. Appl. Chem., Kyushu Univ., Fukuoka, 812, Japan

SOURCE: Journal of the Chemical Society, Chemical

Communications (1980), (5), 220-1

CODEN: JCCCCAT; ISSN: 0022-4936

DOCUMENT TYPE: Journal

LANGUAGE: English

AB PhR (R = H, Me, Cl, OMe), reacted with CO (20 h, 100°, 15 atm) in the presence of Pd(OAc)₂ as catalyst, giving mixts. of o-, m- and/or p-RC₆H₄CO₂H. Similar carboxylation of thiophene and furan gave 18% thiophene- and 35% furan-2-carboxylic acid, resp. No oxygen is required in the reactions.

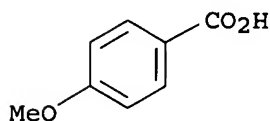
IT 100-09-4P

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of, by palladium-catalyzed carboxylation of anisole)

RN 100-09-4 CAPLUS

CN Benzoic acid, 4-methoxy- (9CI) (CA INDEX NAME)



Refine Search

Search Results -

| Terms | Documents |
|------------------------------------|-----------|
| L5 and p and si and (V or mo or W) | 3 |

Database:

US Pre-Grant Publication Full-Text Database
 US Patents Full-Text Database
 US OCR Full-Text Database
 EPO Abstracts Database
 JPO Abstracts Database
 Derwent World Patents Index
 IBM Technical Disclosure Bulletins

Search:

L6

Search History

DATE: Friday, June 30, 2006 [Printable Copy](#) [Create Case](#)

Set Name Query
 side by side

Hit Count Set Name
 result set

DB=USPT,USOC,EPAB,JPAB,DWPI,TDBD; PLUR=YES; OP=ADJ

| | | | |
|-----------|--|------|-----------|
| <u>L6</u> | L5 and p and si and (V or mo or W) | 3 | <u>L6</u> |
| <u>L5</u> | L4 and heteropoly\$9 | 21 | <u>L5</u> |
| <u>L4</u> | L3 and (palladium or pd) | 439 | <u>L4</u> |
| <u>L3</u> | L1 and (carbon monoxide or co)and oxygen | 1856 | <u>L3</u> |
| <u>L2</u> | L1 and carbon monoxide and oxygen | 187 | <u>L2</u> |
| <u>L1</u> | anisis acid or toluic acid | 6208 | <u>L1</u> |

END OF SEARCH HISTORY

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Search Results - Record(s) 1 through 10 of 21 returned.

☐ 1. Document ID: US 6998491 B2

L5: Entry 1 of 21

File: USPT

Feb 14, 2006

US-PAT-NO: 6998491

DOCUMENT-IDENTIFIER: US 6998491 B2

TITLE: Catalyst comprising a cyclic imide compound

PRIOR-PUBLICATION:

DOC-ID

DATE

US 20020128149 A1

September 12, 2002

| Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KMC | Draw D |
|------|-------|----------|-------|--------|----------------|------|-----------|-----------|-------------|--------|-----|--------|
|------|-------|----------|-------|--------|----------------|------|-----------|-----------|-------------|--------|-----|--------|

☐ 2. Document ID: US 6897176 B2

L5: Entry 2 of 21

File: USPT

May 24, 2005

US-PAT-NO: 6897176

DOCUMENT-IDENTIFIER: US 6897176 B2

TITLE: Olefin polymerization catalyst and process for producing olefin polymer with the catalyst

| Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KMC | Draw D |
|------|-------|----------|-------|--------|----------------|------|-----------|-----------|-------------|--------|-----|--------|
|------|-------|----------|-------|--------|----------------|------|-----------|-----------|-------------|--------|-----|--------|

☐ 3. Document ID: US 6444843 B1

L5: Entry 3 of 21

File: USPT

Sep 3, 2002

US-PAT-NO: 6444843

DOCUMENT-IDENTIFIER: US 6444843 B1

**** See image for Certificate of Correction ****

TITLE: Producing method of (hydroxyalkyl) alicyclic carboxylic acids and intermediates for producing the same and producing method of such intermediates

| Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KMC | Draw D |
|------|-------|----------|-------|--------|----------------|------|-----------|-----------|-------------|--------|-----|--------|
|------|-------|----------|-------|--------|----------------|------|-----------|-----------|-------------|--------|-----|--------|

☐ 4. Document ID: US 5760288 A

L5: Entry 4 of 21

File: USPT

Jun 2, 1998

US-PAT-NO: 5760288

DOCUMENT-IDENTIFIER: US 5760288 A

TITLE: Process for producing aromatic carboxylic acid

| Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Draw. De |
|------|-------|----------|-------|--------|----------------|------|-----------|-----------|-------------|--------|------|----------|
|------|-------|----------|-------|--------|----------------|------|-----------|-----------|-------------|--------|------|----------|

☐ 5. Document ID: US 5723694 A

L5: Entry 5 of 21

File: USPT

Mar 3, 1998

US-PAT-NO: 5723694

DOCUMENT-IDENTIFIER: US 5723694 A

**** See image for Certificate of Correction ****

TITLE: Process for preparing monomethylated or dimethylated phenols

| Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Draw. De |
|------|-------|----------|-------|--------|----------------|------|-----------|-----------|-------------|--------|------|----------|
|------|-------|----------|-------|--------|----------------|------|-----------|-----------|-------------|--------|------|----------|

☐ 6. Document ID: US 5389230 A

L5: Entry 6 of 21

File: USPT

Feb 14, 1995

US-PAT-NO: 5389230

DOCUMENT-IDENTIFIER: US 5389230 A

TITLE: Catalytic hydroconversion process

| Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Draw. De |
|------|-------|----------|-------|--------|----------------|------|-----------|-----------|-------------|--------|------|----------|
|------|-------|----------|-------|--------|----------------|------|-----------|-----------|-------------|--------|------|----------|

☐ 7. Document ID: US 5362382 A

L5: Entry 7 of 21

File: USPT

Nov 8, 1994

US-PAT-NO: 5362382

DOCUMENT-IDENTIFIER: US 5362382 A

TITLE: Resid hydrocracking using dispersed metal catalysts

| Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Draw. De |
|------|-------|----------|-------|--------|----------------|------|-----------|-----------|-------------|--------|------|----------|
|------|-------|----------|-------|--------|----------------|------|-----------|-----------|-------------|--------|------|----------|

☐ 8. Document ID: US 5336395 A

L5: Entry 8 of 21

File: USPT

Aug 9, 1994

US-PAT-NO: 5336395

DOCUMENT-IDENTIFIER: US 5336395 A

TITLE: Liquefaction of coal with aqueous carbon monoxide pretreatment

| | | | | | | | | | | | | |
|------|-------|----------|-------|--------|----------------|------|-----------|-----------|-------------|--------|------|---------|
| Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Draw De |
|------|-------|----------|-------|--------|----------------|------|-----------|-----------|-------------|--------|------|---------|

☐ 9. Document ID: US 5332489 A

L5: Entry 9 of 21

File: USPT

Jul 26, 1994

US-PAT-NO: 5332489

DOCUMENT-IDENTIFIER: US 5332489 A

TITLE: Hydroconversion process for a carbonaceous material

| | | | | | | | | | | | | |
|------|-------|----------|-------|--------|----------------|------|-----------|-----------|-------------|--------|------|---------|
| Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Draw De |
|------|-------|----------|-------|--------|----------------|------|-----------|-----------|-------------|--------|------|---------|

☐ 10. Document ID: US 5200063 A

L5: Entry 10 of 21

File: USPT

Apr 6, 1993

US-PAT-NO: 5200063

DOCUMENT-IDENTIFIER: US 5200063 A

TITLE: Coal hydroconversion process comprising solvent enhanced pretreatment with carbon monoxide

| | | | | | | | | | | | | |
|------|-------|----------|-------|--------|----------------|------|-----------|-----------|-------------|--------|------|---------|
| Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Draw De |
|------|-------|----------|-------|--------|----------------|------|-----------|-----------|-------------|--------|------|---------|

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Terms

Documents

L4 and heteropoly\$9

21

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Search Results - Record(s) 11 through 20 of 21 returned.

☐ 11. Document ID: US 5151173 A

L5: Entry 11 of 21

File: USPT

Sep 29, 1992

US-PAT-NO: 5151173

DOCUMENT-IDENTIFIER: US 5151173 A

TITLE: Conversion of coal with promoted carbon monoxide pretreatment

| | | | | | | | | | | | | |
|------|-------|----------|-------|--------|----------------|------|-----------|-----------|-------------|--------|------|----------|
| Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KM/C | Draw. De |
|------|-------|----------|-------|--------|----------------|------|-----------|-----------|-------------|--------|------|----------|

☐ 12. Document ID: US 5110450 A

L5: Entry 12 of 21

File: USPT

May 5, 1992

US-PAT-NO: 5110450

DOCUMENT-IDENTIFIER: US 5110450 A

TITLE: Coal extract hydroconversion process comprising solvent enhanced carbon monoxide pretreatment

| | | | | | | | | | | | | |
|------|-------|----------|-------|--------|----------------|------|-----------|-----------|-------------|--------|------|----------|
| Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KM/C | Draw. De |
|------|-------|----------|-------|--------|----------------|------|-----------|-----------|-------------|--------|------|----------|

☐ 13. Document ID: US 5071540 A

L5: Entry 13 of 21

File: USPT

Dec 10, 1991

US-PAT-NO: 5071540

DOCUMENT-IDENTIFIER: US 5071540 A

TITLE: Coal hydroconversion process comprising solvent extraction and combined hydroconversion and upgrading

| | | | | | | | | | | | | |
|------|-------|----------|-------|--------|----------------|------|-----------|-----------|-------------|--------|------|----------|
| Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KM/C | Draw. De |
|------|-------|----------|-------|--------|----------------|------|-----------|-----------|-------------|--------|------|----------|

☐ 14. Document ID: US 5026475 A

L5: Entry 14 of 21

File: USPT

Jun 25, 1991

US-PAT-NO: 5026475

DOCUMENT-IDENTIFIER: US 5026475 A

TITLE: Coal hydroconversion process comprising solvent extraction (OP-3472)

| Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Drawn De |
|------|-------|----------|-------|--------|----------------|------|-----------|-----------|-------------|--------|------|----------|
|------|-------|----------|-------|--------|----------------|------|-----------|-----------|-------------|--------|------|----------|

☐ 15. Document ID: US 4357229 A

L5: Entry 15 of 21

File: USPT

Nov 2, 1982

US-PAT-NO: 4357229

DOCUMENT-IDENTIFIER: US 4357229 A

TITLE: Catalysts and hydrocarbon treating processes utilizing the same

| Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Drawn De |
|------|-------|----------|-------|--------|----------------|------|-----------|-----------|-------------|--------|------|----------|
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☐ 16. Document ID: US 4348270 A

L5: Entry 16 of 21

File: USPT

Sep 7, 1982

US-PAT-NO: 4348270

DOCUMENT-IDENTIFIER: US 4348270 A

TITLE: Catalysts and hydrocarbon treating processes utilizing the same

| Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Drawn De |
|------|-------|----------|-------|--------|----------------|------|-----------|-----------|-------------|--------|------|----------|
|------|-------|----------|-------|--------|----------------|------|-----------|-----------|-------------|--------|------|----------|

☐ 17. Document ID: US 4295996 A

L5: Entry 17 of 21

File: USPT

Oct 20, 1981

US-PAT-NO: 4295996

DOCUMENT-IDENTIFIER: US 4295996 A

TITLE: Catalysts for hydrocarbon treating processes

| Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Drawn De |
|------|-------|----------|-------|--------|----------------|------|-----------|-----------|-------------|--------|------|----------|
|------|-------|----------|-------|--------|----------------|------|-----------|-----------|-------------|--------|------|----------|

☐ 18. Document ID: US 4295995 A

L5: Entry 18 of 21

File: USPT

Oct 20, 1981

US-PAT-NO: 4295995

DOCUMENT-IDENTIFIER: US 4295995 A

TITLE: Catalysts hydrocarbon treating processes

| Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Drawn De |
|------|-------|----------|-------|--------|----------------|------|-----------|-----------|-------------|--------|------|----------|
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☐ 19. Document ID: US 4226742 A

L5: Entry 19 of 21

File: USPT

Oct 7, 1980

US-PAT-NO: 4226742

DOCUMENT-IDENTIFIER: US 4226742 A

TITLE: Catalyst for the hydroconversion of heavy hydrocarbons

| | | | | | | | | | | | | |
|------|-------|----------|-------|--------|----------------|------|-----------|-----------|-------------|--------|------|---------|
| Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Draw De |
|------|-------|----------|-------|--------|----------------|------|-----------|-----------|-------------|--------|------|---------|

☐ 20. Document ID: US 4178227 A

L5: Entry 20 of 21

File: USPT

Dec 11, 1979

US-PAT-NO: 4178227

DOCUMENT-IDENTIFIER: US 4178227 A

TITLE: Combination hydroconversion, fluid coking and gasification

| | | | | | | | | | | | | |
|------|-------|----------|-------|--------|----------------|------|-----------|-----------|-------------|--------|------|---------|
| Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Draw De |
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Search Results - Record(s) 21 through 21 of 21 returned.

☐ 21. Document ID: US 4134825 A

L5: Entry 21 of 21

File: USPT

Jan 16, 1979

US-PAT-NO: 4134825

DOCUMENT-IDENTIFIER: US 4134825 A

TITLE: Hydroconversion of heavy hydrocarbons

| Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KMIC | Draw. De |
|------|-------|----------|-------|--------|----------------|------|-----------|-----------|-------------|--------|------|----------|
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| Terms | Documents |
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Hit List

First Hit**Clear****Generate Collection****Print****Fwd Refs****Bkwd Refs****Generate OACS****Search Results - Record(s) 1 through 3 of 3 returned.**☐ 1. Document ID: US 6897176 B2

L6: Entry 1 of 3

File: USPT

May 24, 2005

US-PAT-NO: 6897176

DOCUMENT-IDENTIFIER: US 6897176 B2

TITLE: Olefin polymerization catalyst and process for producing olefin polymer with the catalyst

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|------|-------|----------|-------|--------|----------------|------|-----------|-----------|-------------|--------|------|---------|
| Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Draw De |
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☒ 2. Document ID: US 5760288 A

L6: Entry 2 of 3

File: USPT

Jun 2, 1998

US-PAT-NO: 5760288

DOCUMENT-IDENTIFIER: US 5760288 A

TITLE: Process for producing aromatic carboxylic acid

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|------|-------|----------|-------|--------|----------------|------|-----------|-----------|-------------|--------|------|---------|
| Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Draw De |
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☐ 3. Document ID: US 5723694 A

L6: Entry 3 of 3

File: USPT

Mar 3, 1998

US-PAT-NO: 5723694

DOCUMENT-IDENTIFIER: US 5723694 A

**** See image for Certificate of Correction ****

TITLE: Process for preparing monomethylated or dimethylated phenols

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|------|-------|----------|-------|--------|----------------|------|-----------|-----------|-------------|--------|------|---------|
| Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Draw De |
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